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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,295	04/28/2005	Takuma Iida	MATS:049	8664
7590 03/24/2006				
Rossi & Associates PO Box 826 Ashburn, VA 20146-0826		EXAMINER TIBBITS, PIA FLORENCE		
		ART UNIT PAPER NUMBER		
		2838		
DATE MAILED: 03/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/506,295

Applicant(s)

IIDA ET AL.

Examiner

Pia F. Tibbits

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 8 is/are rejected.
- 7) ☒ Claim(s) 3-7 and 9-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: approved dwg.

### **DETAILED ACTION**

This Office action is in answer to the amendment filed 1/30/2006. Claims 1-18 are pending.

#### ***Specification***

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. For example, element 4a shown in the replacement drawing is not described in the specification.
2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter: "the secondary battery does not exceed a preset voltage". See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2: "the operational control circuit is provided with a non-detecting timer for preventing the sensors from detecting the voltage" is not clear since a timer cannot prevent the sensors from detecting.

The recitation "the voltage of the battery does not exceed a preset voltage within a predetermined time period" was interpreted in light of the specification describing "a recovery voltage of the secondary batteries does not exceed a predetermined voltage after a lapse of a predetermined time".

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2838

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by **Terada et al.**

[6483272].

Terada discloses in figures 1-17 a battery package comprising a group of batteries 101 having a plurality of connected batteries 101, forming a secondary battery 102 [see figures 2, 3, 13, 14; column 4, lines 31-32]; a plurality of sensors for detecting a temperature 103 and a voltage V [see column 4, lines 64-66]; a display device 119 for displaying a condition of the secondary battery; a switch 131 for controlling charge and discharge of the secondary battery [see column 5, lines 60-62]; an operational control circuit 105 for generating a signal based on signals input from the plurality of sensors to make the display device display the condition of the secondary battery 102, and to activate the switch 131, and a refreshing demand display device for displaying a need to initiate a refreshing charge and discharge [see column 1, lines 66-67; column 2, lines 1-20, 35-40; column 4, lines 7-9; column 5, lines 1-40].

As to the method claim 8: the method steps will be met during the normal operation of the apparatus described above.

#### ***Allowable Subject Matter***

7. Claims 2, 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

As to claims 2, 9: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a battery package and method comprising, *inter alia*, the operational control circuit counts a number of times that the recovery voltage of the secondary battery does not exceed a preset voltage within the predetermined time period, and the refreshing demand display device displays a need to initiate a refreshing charge and discharge when the counted number reaches a predetermined number.

Art Unit: 2838

8. Claims 3-7, 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 3-7: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a battery package and method comprising, *inter alia*, the operational control circuit counts a number of times that the recovery voltage of the secondary battery does not exceed a preset voltage within the predetermined time period, and the refreshing demand display device displays a need to initiate a refreshing charge and discharge in any of events that the counted number reaches a predetermined number, and a recovery voltage of the batteries does not exceed a predetermined voltage after a predetermined time has elapsed from a moment when the secondary battery comes to a final discharge voltage.

9. Claims 17, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 17, 18: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a battery package and method comprising, *inter alia*, the refreshing demand display device displays a need to initiate a refreshing charge and if a recovery voltage of the secondary battery does not exceed a predetermined voltage after a lapse of a predetermined time from a moment when the secondary battery comes to a final discharge voltage.

### ***Response to Arguments***

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

Art Unit: 2838

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is 571-272-2086. If unavailable, contact the Supervisory Patent Examiner Karl Easthom whose telephone number is 571-272-1989. The Technology Center Fax number is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

March 16, 2006

Pia Tibbits

Primary Patent Examiner



3/16/06 APPROVED



BATTERY PACKAGE AND METHOD OF CHARGING AND DISCHARGING THE SAME  
Takuma IIDA, et al; SN. 10/506,295  
Replacement Sheet

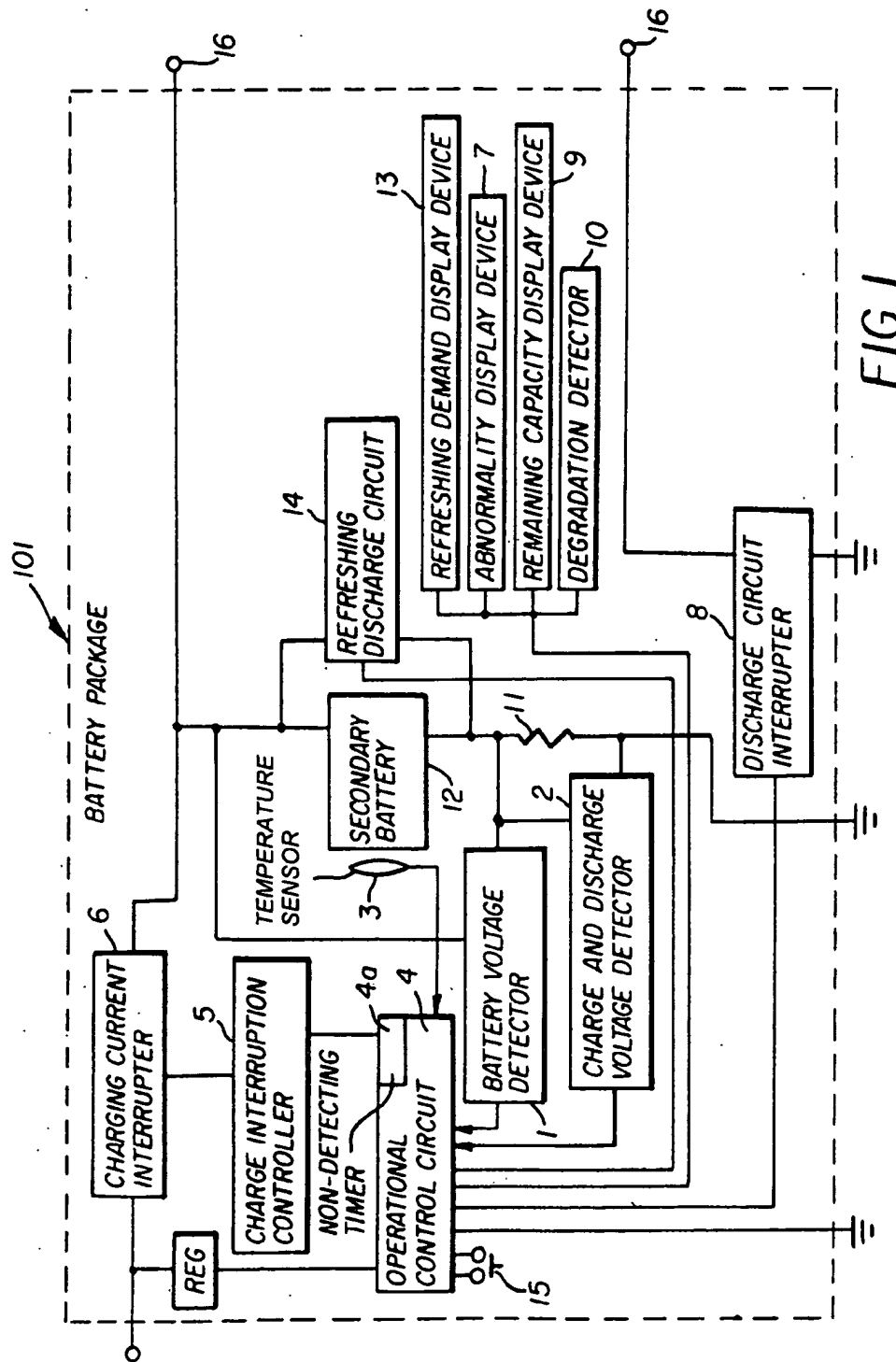


FIG. 1